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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,996	01/20/2004	Scott L. Smith	72212	1657

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EXAMINER

BRINEY III, WALTER F

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/760,996

Applicant(s)

SMITH ET AL.

Examiner

Walter F. Briney III

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-18, 21-24 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-18, 21-24 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 15-18, 21-24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (figure 1 and paragraphs 2 and 3) in view of Takeshita et al. (US Patent 4,385,336).**

**Claim 15** is limited to "a method of delivering span power." It is noted that the applicant's admitted prior art (drawings, figure 1; and specification, paragraphs 2 and 3) describes "a method of delivering span power by way of a plurality of telecommunication wireline segments to respective ones of a plurality of remote telecommunication terminals." In particular, figure 1 depicts a central office transceiver 10 for providing span power over "wireline" 20 to remote terminal 30. Paragraph 3 discloses a plurality of such transceivers, respective "wireline segments" and "respective remote telecommunication terminals." Paragraph 3 discloses steps (a) and (b), namely that "multiple central office transceiver units...derive span power for their respective remote transceiver units from a common...power source." The common power source corresponds to "a span power bus." While paragraph 3 of the admitted prior art identifies the ground fault problem recited in step (c), the applicant's admitted prior art fails to anticipate "coupling respective ones of said plurality of telecommunication

wireline segments to respective ones of a plurality of ground fault detection and isolation circuits,” and therefore, fails to anticipate steps (c), (d) and (e) and their respective substeps. As shown below, this deficiency is overcome by an obvious modification.

In particular, the previously cited prior art reference Takeshita recognizes the ground fault problem in the scope of a current supplying circuit for use in a subscriber circuit (i.e. the central office transceiver of applicant's admitted prior art). See, in particular, column 1, lines 6-12, as well as the rest of column 1 and column 2, lines 1-57. In operation, the invention of Takeshita detects a ground fault in a subscriber line and reduces current thereto (i.e. “isolates”). See column 2, lines 30-54, as well as column 3, lines 44-52. The invention of Takeshita is generally applicable to any and all current supplying circuits disclosed by applicant's admitted prior art, and thus meets step (c), which is directed toward providing ground fault detection and isolation for each wireline segment. Simply providing the ground fault circuits of Takeshita as taught will enable them to detect and isolate circuits as recited in step (d). Isolation in response to ground fault detection occurs in accordance with step (e). See column 3, lines 44-52. Steps (d1) and (d2) were shown to be taught by Takeshita apropos the rejection of claim 1 in the Non-Final Rejection filed 25 August 2005.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the functionality for detecting and isolating ground faults as taught by Takeshita for the purpose of removing ground faults that can be potentially dangerous. See Takeshita column 1, lines 6-12; and applicant's specification, paragraph 3, lines 5-16.

**Claims 16-18** are limited to "the method according to claim 15," as covered by applicant's admitted prior art in view of Takeshita. First, note that claims 16-18 define essentially the same subcombination (i.e. ground fault detection and isolation) as originally filed claims 2-4. As shown apropos the rejections of claims 2-4 on 25 August 2005, Takeshita teaches all limitations of the subcombination recited in claims 16-18. Therefore, applicant's admitted prior art in view of Takeshita makes obvious all limitations of the claim.

**Claim 21** is limited to "a method of delivering power." As shown in the rejection of claim 1, applicant's admitted prior art sets forth a method of providing power from a common supply source to a plurality of remote terminals by way of a plurality of respective wireline segments and respective central office transceivers. Further, it would have been obvious to provide ground fault detection and isolation as taught by Takeshita. Steps (a)-(e), (d1) and (d2) are essentially the same as the corresponding steps in claim 1. Therefore, applicant's admitted prior art in view of Takeshita makes obvious all limitations of the claim.

**Claims 22-24** are limited to "the method according to claim 21," as covered by applicant's admitted prior art in view of Takeshita. First, note that claims 22-24 define essentially the same subcombination (i.e. ground fault detection and isolation) as originally filed claims 2-4. As shown apropos the rejections of claims 2-4 on 25 August 2005, Takeshita teaches all limitations of the subcombination recited in claims 22-24. Therefore, applicant's admitted prior art in view of Takeshita makes obvious all limitations of the claim.

**Claim 27** is limited to “a system for controlling deliver of span power.” The system of claim 27 necessarily follows from executing either methods defined in claims 15 or 21. Therefore, applicant’s admitted prior art in view of Takeshita makes obvious all limitations of the claim.

**Claim 28** is limited to “the system according to claim 27,” as covered by applicant’s admitted prior art in view of Takeshita. The system defined herein necessarily follows from the methods of either claim 16 or 22. Therefore, applicant’s admitted prior art in view of Takeshita makes obvious all limitations of the claim.

**Claim 28** is limited to “the system according to claim 27,” as covered by applicant’s admitted prior art in view of Takeshita. The system defined herein necessarily follows from the methods of either claims 17 and 18 or 23 and 24. Therefore, applicant’s admitted prior art in view of Takeshita makes obvious all limitations of the claim.

### ***Response to Arguments***

Applicant's arguments with respect to claims 15-18, 21-24 and 27-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**

WFB